

ART. VII.—*On Two New Fossil Sponges from Sandhurst.*

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Both the specimens, figures of which I append, were found at Ironbark, Sandhurst, Victoria, in rock of the Landeilo flag age. The spicules are of a dead black colour, and are preserved in a soft, cream-coloured, slightly micaceous schist.

*Genus.*—Protospongia. *Fam.*—Protospongiidæ (Hinde).  
*Sub-Order.*—Hexactinellidæ.

Hinde defines Protospongia as follows:—"Form of sponge unknown. The portions preserved consist either of detached spicules, or fragments of a delicate spicular framework, formed of a single layer of four-rayed spicules of various dimensions. The larger spicules are arranged so as to form regular squares, which are divided by smaller spicules into smaller squares, and these are again sub-divided, so that the surface of a fairly complete specimen resembles lattice-work."

PROTOSPONGIA RETICULATA (N. SP., FIGS. 1 AND 2).

*Description.*—The specimen is nearly circular in outline, and probably in its living state had a somewhat spherical form. Its length is about 7 cm. and its width about 6 cm. The spicules are cruciform, the four rays crossing at angles varying from  $70^{\circ}$  to  $90^{\circ}$ , the variation from the usual rectangular form of Hexactinellid spicules being probably due to compression. The spicules are of various sizes. The larger ones (the rays of which measure 3.5 mm. in length and .5 mm. in diameter) are so placed that they enclose squares, and smaller spicules, the rays of which measure 1.5 mm. in length, are placed inside these larger squares so as to divide each into four smaller squares. Numerous smaller cruciform spicules are scattered about in an apparently irregular manner, and it does not appear that the subdivision of the squares is carried as far as in typical

